

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference H1811-01	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/013745	International filing date (day/month/year) 28 October 2003 (28.10.2003)	Priority date (day/month/year) 28 October 2002 (28.10.2002)
International Patent Classification (IPC) or national classification and IPC G11B 7/0045, 7/125		
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 26 March 2004 (26.03.2004)	Date of completion of this report 07 January 2005 (07.01.2005)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/013745

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the claims:
- pages _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ the drawings:
- pages _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
 - ☒ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
 - ☐ not complied with for the following reasons:

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos. _____

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP03/13745

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	3, 5-8, 13, 15-18, 22-25	YES
	Claims	1-2, 4, 9-12, 14, 19-21, 26-27	NO
Inventive step (IS)	Claims		YES
	Claims	1-27	NO
Industrial applicability (IA)	Claims	1-27	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1: JP, 6-12674, A (Matsushita Electric Industrial Co., Ltd.), 21 January, 1994 (21.01.94), [0015] to [0017], Fig. 1

Document 2: JP, 9-7176, A (Mitsubishi Chemical Corp.), 10 January, 1997 (10.01.97), [0016] to [0022] and [0034]

Document 3: JP, 2000-11382, A (Yamaha Corp.), 14 January, 2000 (14.01.00), [0012] to [0025], Fig. 2

Document 4: JP, 9-282661, A (Mitsubishi Chemical Corp.), 31 October, 1997 (31.10.97), [0020]

Claims 1, 2, 4, 11, 12, 14 and 21: Document 1

The subject matters of claims 1, 2, 4, 11, 12, 14 and 21 do not appear to be novel or to involve an inventive step since similar art is shown in [0015] to [0017] and Fig. 1 of document 1 cited in the ISR.

Claims 3 and 13: Documents 1 and 2

The technique of altering a bias power according to linear velocity is disclosed in [0016] to [0022] of document 2 cited in the ISR.

To apply the technique of document 2 to the optical information recording device and recording method of document 1 could have been easily conceived of by a person skilled in the art and so does not appear to involve an inventive step.

Claims 5-8 and 15-18: Documents 1 and 3

The technique of making the recording waveform a steplike one is disclosed in [0012] to [0025] and Fig. 2 of document 3 cited in the ISR.

To apply the technique of document 3 to the optical information recording device and recording method of document 1 could have been easily conceived of by a person skilled in the art and so does not appear to involve an inventive step.

Claims 9, 10, 19, 20, 26 and 27: Document 2

The subject matters of claims 9, 10, 19, 20, 26 and 27 do not appear to be novel or to involve an inventive step. Similar art is described in [0016] to [0022] and [0034] of document 2 cited in the ISR.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2003-203340 A [P, X]	18.07.2003	07.21.2002	

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: V

Claim 22: Documents 1 and 4

The technique of previously recording pulse divide information such as power in a disk to be used is disclosed in [0020] of document 4.

To apply the technique of document 4 to the invention of document 1 could have been easily conceived of by a person skilled in the art and so does not appear to involve an inventive step.

Claims 23-25: Documents 1, 3 and 4

The technique of making the recording waveform a steplike one and the technique of previously recording pulse divide information such as power in a disk to be used are disclosed respectively in documents 3 and 4.

To apply the techniques of documents 3 and 4 to the invention of document 1 could have been easily conceived of by a person skilled in the art and so does not appear to involve an inventive step.